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(54) **Process for packaging compressed garments, furnishing articles, and like, and articles realized by said process**

(57) The invention concerns a process for packaging compressed garments, furnishing articles and like, comprising the steps of:

- folding the article in a substantially elongated shape;
- rolling up the so folded article;
- introducing the folded and rolled up article in a die

of a press;

- subjecting the article to a mechanical pressure;
- extracting the article from the die; and
- packaging the so obtained article.

The invention also concerns the articles obtained by the above process.

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## Description

The present invention concerns a process for packaging compressed garments, furnishing articles and like.

The invention also relates to the articles obtained by the process according to the invention.

The solution proposed according to the invention provides improvements with respect to two specific problems.

Particularly, we refer to the problems of lack space always more diffused today either for the storing of the products at the factory, with the wholesaler or with the retailer, and for the transport of the products from one place to another.

The other aspect that is faced up by the present invention refers to the always bigger needing of having new and original systems for the promotion of the product, or for the promotion of other products by the advertising or some gadgets.

Further, the solution according to the present invention allows to obtain a packaging process far more fast with respect to the present packaging processes, particularly avoiding with respect to the traditional process the ironing and enveloping steps.

In view of the above, the solution suggested according to the present invention allows to realize compressed packaged articles in a very easy way, with a remarkable reduction of the final volume.

Further, the solution according to the present invention allows to have advertising elements very interesting both for the promotion of the same article and for the promotion of other products and/or services.

It is therefore specific object of the present invention a process for packaging compressed garments, furnishing articles and like, comprising the steps of:

- folding the article in a substantially elongated shape;
- rolling up the so folded article;
- introducing the folded and rolled up article in a die of a press;
- subjecting the article to a mechanical pressure;
- extracting the article from the die; and
- packaging the so obtained article.

Preferably, according to the invention, after said article extraction step from the press, above and below the compressed article, two paper based material elements are provided.

Always according to the invention, said packaging step of the article is performed employing thermoshrinkable materials, preferably thermoshrinkable polypropylene.

Still according to the invention, said mechanical pressure is applied by a hydraulic, oleodynamic, pneumatic, etc. piston.

Said die wherein the article is inserted for the pressure can have a the desired shape, particularly rounded, triangular, square, rectangular, etc.

As already said, they are also object of the present invention the articles obtained by the above process.

Particularly, said articles can comprise garments, like T-shirts, pants, brassieres, bands, handkerchiefs etc., or towels, sheets, table-cloths, wipers etc.

Preferably, according to the invention, said article is made by 100% cotton.

the present invention will be now described, for illustrative but not limitative purposes, according to its preferred embodiments, with particular reference to the enclosed drawings, wherein:

figures 1a - 1d show a garment during the various steps of the process according to the invention; and figures 2a - 2d respectively show, from the above and laterally, a packaged article according to the invention.

In the enclosed drawings, reference will be made to a T-shirt, but it is to be understood that the same applies to any other article obtained by the process according to the invention.

Observing now figures 1a - 1d, it can be noted a T-shirts 1 opened (figure 1a), that is then folded (figure 1b), so as to take the substantially elongated shape 2.

Subsequently, the T-shirt is rolled up (figure 1c), so as to take the shape 3, and introduced within a die (not shown).

Here the T-shirt is subjected to pressure, until reaching the shape 4 of figure 1d.

The amount of the pressure determines the compression of the T-Shirt, and consequently the saving of volume.

After having been extracted from the die, two paperboard discs are applied, the upper one 5 can be seen in figure 2a, and then the article is packaged using thermoshrinkable polypropylene, obtaining the product 6 of figure 2b.

The paperboard disc 5 realize a very interesting advertising means since they allow to provide any kind of written message, and can be easily modified.

Further, they can be a gadget, for example under glasses and like.

The present invention has been described for illustrative, but not limitative purposes, according to its preferred embodiments, but it is to be understood the modifications and/or changes can be introduced by those skilled in the art without departing from the relevant scope, as defined by the enclosed claims.

## Claims

1. Process for packaging compressed garments, furnishing articles and like, characterized by comprising the steps of:

- folding the article in a substantially elongated

- shape;
  - rolling up the so folded article;
  - introducing the folded and rolled up article in a die of a press;
  - subjecting the article to a mechanical pressure; 5
  - extracting the article from the die; and
  - packaging the so obtained article.
2. Process according to claim 1, characterized in that after said article extraction step from the press, 10 above and below the compressed article, two paper based material elements are provided.
3. Process according to one of the preceding claims, characterized in that said packaging step of the article is performed employing thermoshrinkable materials. 15
4. Process according to claim 3, characterized in that said packaging step is performed employing thermoshrinkable polypropylene. 20
5. Process according to one of the preceding claims, characterized in that said mechanical pressure is applied by a hydraulic, oleodynamic, pneumatic, etc. piston. 25
6. Process according to one of the preceding claims, characterized in that said die wherein the article is inserted for the pressure have a the desired shape, particularly rounded, triangular, square, rectangular, etc. 30
7. Article obtained by the process according to one of the claims 1-6. 35
8. Article according to claim 7, characterized in that it comprises garments, like T-shirts, pants, brassieres, bands, handkerchiefs etc., or towels, sheets, table-cloths, wipers etc. 40
9. Article according to claim 7 or 8, characterized in that it is made by 100% cotton.
10. Process for packaging compressed garments, furnishing articles and like, according to each one of the preceding claims, substantially as described and illustrated before. 45
11. Article according each one of the claims 7 - 9, substantially as illustrated and described. 50

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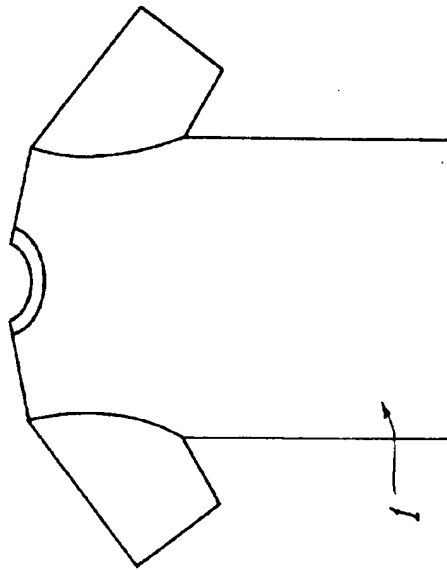


FIG. 1a

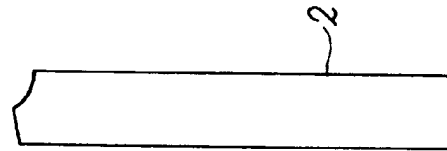


FIG. 1b

FIG. 1c

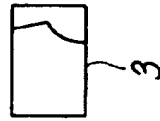


FIG. 1d

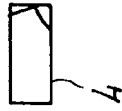


FIG. 2a

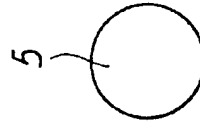
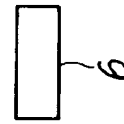


FIG. 2b





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# PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 45 of the European Patent Convention EP 95 83 0195 shall be considered, for the purposes of subsequent proceedings, as the European search report

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	EP-A-0 220 980 (ISOVER) * page 6, line 35 - page 7, line 33; figure 1 *	1,7	B65B25/20
A	GB-A-1 132 861 (PRETTY POLLY) * page 2, line 9 - line 16; figures 1,5,7 *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B65B B65D
INCOMPLETE SEARCH			
<p>The Search Division considers that the present European patent application does not comply with the provisions of the European Patent Convention to such an extent that it is not possible to carry out a meaningful search into the state of the art on the basis of some of the claims</p> <p>Claims searched completely : -- 1-9</p> <p>Claims searched incompletely :</p> <p>Claims not searched : -- 10</p> <p>Reason for the limitation of the search:</p> <p style="text-align: center;">RULE 29 (6) EPC</p>			
Place of search		Date of completion of the search	Examiner
THE HAGUE		1 February 1996	Claeys, H
CATEGORY OF CITED DOCUMENTS			
<p>X : particularly relevant if taken alone</p> <p>Y : particularly relevant if combined with another document of the same category</p> <p>A : technological background</p> <p>Q : non-written disclosure</p> <p>P : intermediate document</p> <p>T : theory or principle underlying the invention</p> <p>E : earlier patent document, but published on, or after the filing date</p> <p>D : document cited in the application</p> <p>L : document cited for other reasons</p> <p>&amp; : member of the same patent family, corresponding document</p>			

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